

U.S. Patent Application Serial No. 10/947,734  
Amendment dated July 17, 2007  
Reply to Office Action of January 18, 2007

### **REMARKS**

This Amendment and Response is in reply to the Office Action of January 18, 2007. A three (3) month Petition For Extension of Time is filed concurrently herewith. Therefore, the time period for reply extends up to and includes July 18, 2007. Applicant wishes to thank the Examiner for his careful review and consideration of the present application.

Applicant has amended claims 1, 5, 7, and 8 above. No new matter has been entered and such amendments are fully supported by the specification, drawings and claims as originally filed. For example, support for Continuous Wave Doppler monitoring of blood flows may be found at page 4, lines 14-22. Claims 1-8 remain pending in the present application.

### **Claim Objection and Claim Rejections under 35 USC § 112**

The Examiner first objected to claim 5. Applicant has amended claim 5 to overcome the objection. The Examiner's reconsideration and withdrawal of the objection is requested.

The Examiner rejected claims 1-8 under §112 as being indefinite. The Examiner specifically identified claims 1, 5, 7 and 8. Applicant has amended these claims and submits that they are definite. In accordance, Applicant requests that the §112 rejection be withdrawn.

Applicant notes that the amendments identified in this section were not made in response to an art based rejection. Accordingly, such amendments should not be construed in a limiting manner.

### **Claim Rejections under 35 USC. § 102**

At paragraphs 8-13 of the subject Action, the Examiner rejected claims 1-8 under §102(b) as being anticipated by U.S. Patent No. 6,530,887 (Gilbert et al.). Applicant traverses the rejection.

First, claims 1 and 7 have been amended to provide for a Continuous Wave (CW) Doppler monitoring of blood flows. The utilization of CW Doppler allows for real time monitoring of blood flows. By contrast, Gilbert does not disclose the use of CW Doppler. The

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flow monitoring techniques of Gilbert require beamformers which are required for the form of 2D ultrasound imaging used by Gilbert. The 2D ultrasound imaging techniques mentioned by Gilbert only include color-flow imaging, power-Doppler and spectral sonogram. They do not include CW Doppler. CW Doppler does not require the beam forming techniques of Gilbert which provides for a more easily constructed, simpler device.

Second, there is no disclosure in Gilbert of emitting an audible form of the audio blood flow signal to the ears of the user. While Fig. 11 illustrates a system having headphones, the discussion of the figure at column 28 lines 43-44 merely says "*a pair of speakers for audio*". The audio could relate to anything, including playback of the material recorded by the microphone. There is no disclosure of providing an audio form of the audio blood flow signal to the ears of the user as required by claims 1 and 7.

Third, with respect to claims 2-6 and 8, as noted above, Gilbert does not disclose all the limitations of claims 1 and 7 of the present application. Since claims 2-6 depend directly or indirectly from claim 1 and since claim 8 depends from claim 7, it is submitted that Gilbert does not disclose all the limitations of claims 2-6 and 8 of the present application.

Further with respect to claims 3 and 4, Gilbert does not disclose any form of audio spatialisation around a listener. Audio spatialisation relies on projecting an audio signal over speakers so that the audio takes on position or spatial characteristics. The Examiner has referred to the "spectral sonogram" of Gilbert. This is a visual display process as can clearly be seen by the discussion at column 32 lines 19 to 22 of Gilbert:

*"A display of the distribution of velocities can be made by Fourier transforming the received signal and showing the result. This display is also called a sonogram".*

Therefore, it is submitted that Gilbert does not show a process of audio spatialisation of the blood flow signal as recited in claims 3 and 4.

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In view of the foregoing, reconsideration and withdrawal of the § 102(b) rejection to claims 1-8 is requested. Applicant does not otherwise concede the correctness of the rejections and reserves the right to make additional arguments as may be necessary.

**Conclusion**

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

17 July 2007  
Date



Respectfully submitted,

A handwritten signature in black ink, appearing to read "B. H. Batzli", written over a horizontal line.

Brian H. Batzli  
Reg. No. 32,960  
Merchant & Gould P.C.  
P. O. Box 2903  
Minneapolis, MN 55402-0903  
612.336.4755